

APPENDIX B

SPORTS FIELDS

B-1. Official baseball (including Babe Ruth and Senior League) (see fig B-1)

a. Source of information. The Official Playing Rules Committee, 1974. Babe Ruth Baseball, Little League Baseball, Inc.

b. Recommended area. Ground space is 3.0 to 3.5 acres minimum.

c. Size and dimensions. Baselines are 90 feet 0 inches. Pitching distance is 60 feet 6 inches. Pitchers mound is 10 inches above the level of home plate. Distance down foul lines is 325 feet minimum, 350 preferred. Outfield distance to center field is 400 plus feet. For Senior League Baseball the recommended distance from plate to outfield fence at all points is 300 plus feet. All distances are from home plate.

d. Orientation. Optimum orientation is to locate home plate so that the pitcher is throwing across the sun and the batter is not facing it. The line from home plate through the pitchers mound to second base should run east-northeast.

e. Surface and drainage. Surface is to be turf. Infield may be skinned, and shall be graded so that the baselines and home plate are level.

f. Special considerations. Backstop is to be provided at a minimum distance of 40 feet or preferably 60 feet behind home plate.

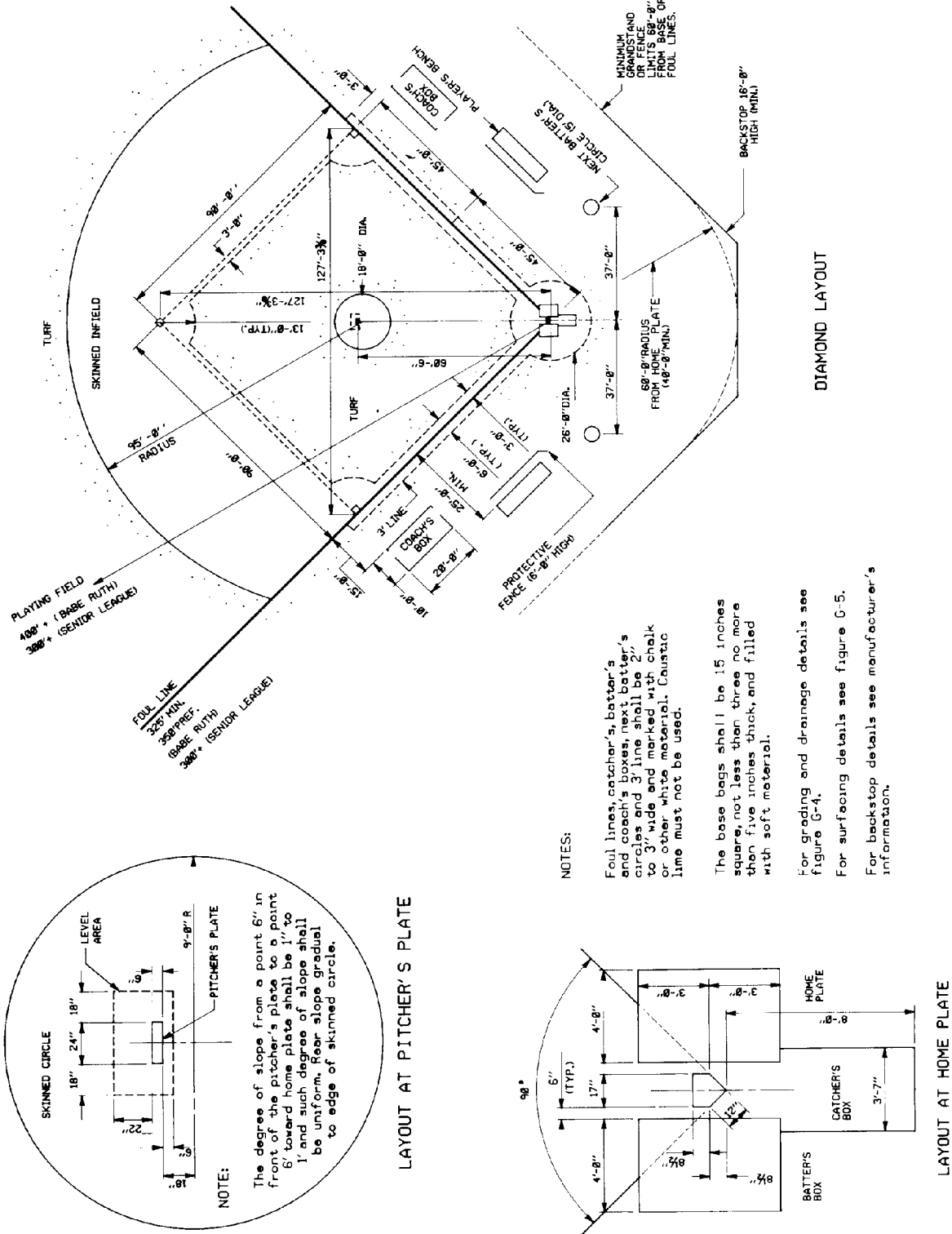


Figure B-1. Baseball—official, Babe Ruth, and Senior League.

B-2. Bronco League baseball (9-12 yrs.) (see fig B-2)

- a. Source of information.* Pony Baseball, Inc.
- b. Recommended area.* Ground space is 1.0 acre minimum.
- c. Size and dimension.* Baselines are 70 feet 0 inch. Pitching distance is 48 feet 0 inch. Pitcher's plate is 6 inches above the level of home plate. Distance down foul line is 200 feet. Outfield distance to pocket in center field is 250 feet.
- d. Orientation.* Optimum orientation is to locate home plate so that the pitcher is throwing across the sun and the batter is not facing it. The line from home plate through the pitcher's mound and second base should run east-northeast.
- e. Surface and drainage.* Surface is to be turf. Infield may be skinned, and shall be graded so that the baselines and home plate are level.
- f. Special considerations.* Backstop is to be provided at a recommended distance of 30 feet behind home plate.

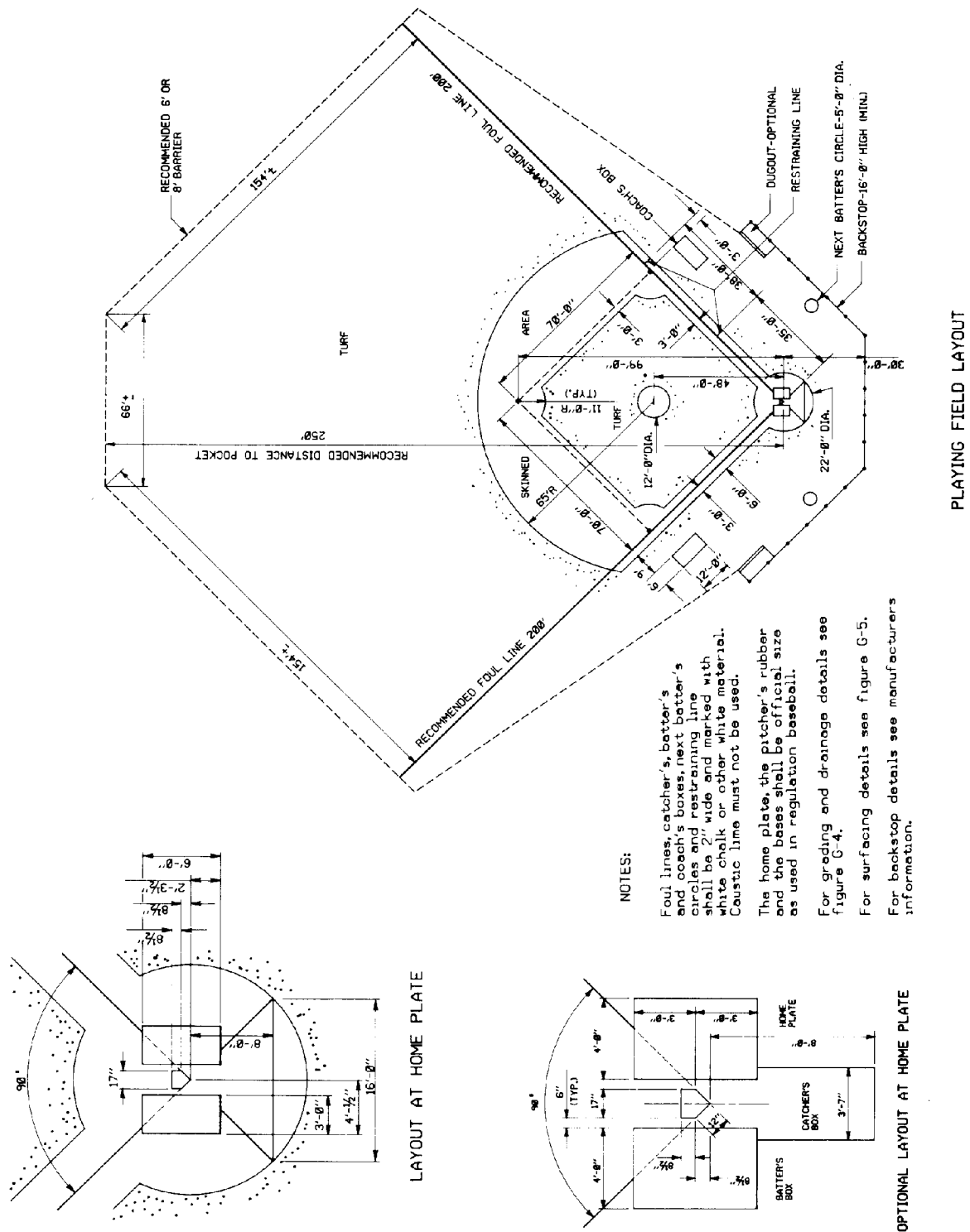
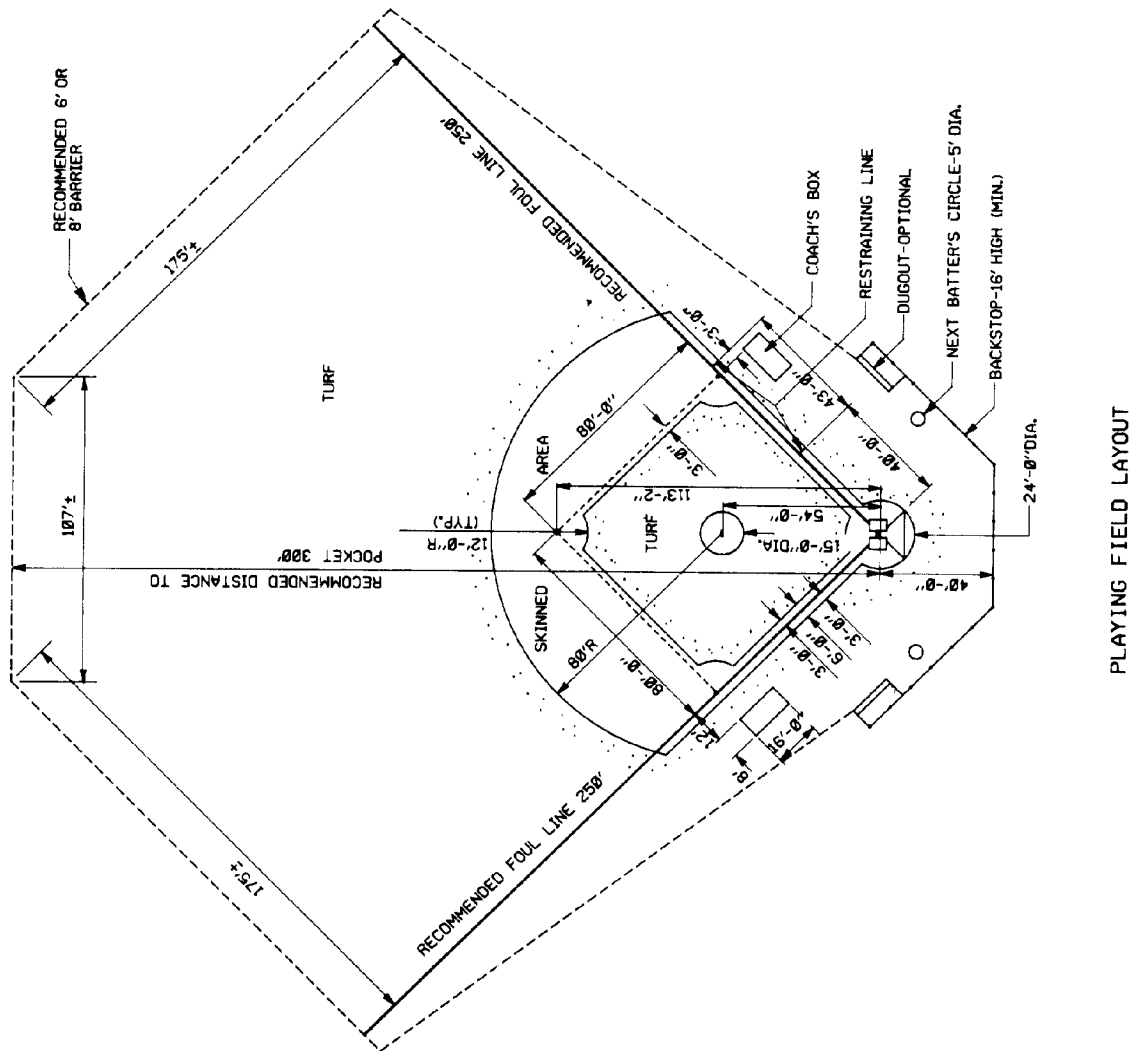


Figure B-2. Bronco League baseball (9-12 yrs.).

B-3. Pony League baseball (13-14 yrs.) (see fig B-3).

- a. Source of information.* Pony League, Boy's Baseball, Inc.
- b. Recommended area.* Ground space is 2.0 acres minimum.
- c. Size and dimension.* Baselines are 80 feet 0 inch. Pitching distance is 54 feet 0 inch. Pitcher's plate is 8 inches above the level of home plate. Distance down foul line is 250 feet. Outfield distance to pocket in center field is 300 feet.
- d. Orientation.* Optimum orientation is to locate home plate so that the pitcher is throwing across the sun and the batter is not facing it. The line from home plate through the pitcher's mound and second base should run east-northeast.
- e. Surface and drainage.* Surface is to be turf. Infield may be skinned, and shall be graded so that the baselines and home plate are level.
- f. Special consideration.* Backstop is to be provided at a recommended distance of 40 feet behind home plate.



PLAYING FIELD LAYOUT

NOTES:

Foul lines, catcher's, batter's and coach's boxes, next batter's circles and restraining line shall be 2" wide and marked with white chalk or other white material. Caustic lime must not be used.

The home plate, the pitcher's rubber and the bases shall be official size as used in regulation baseball.

For layouts at home plate see figure B-2.

For grading and drainage details see figure G-4.

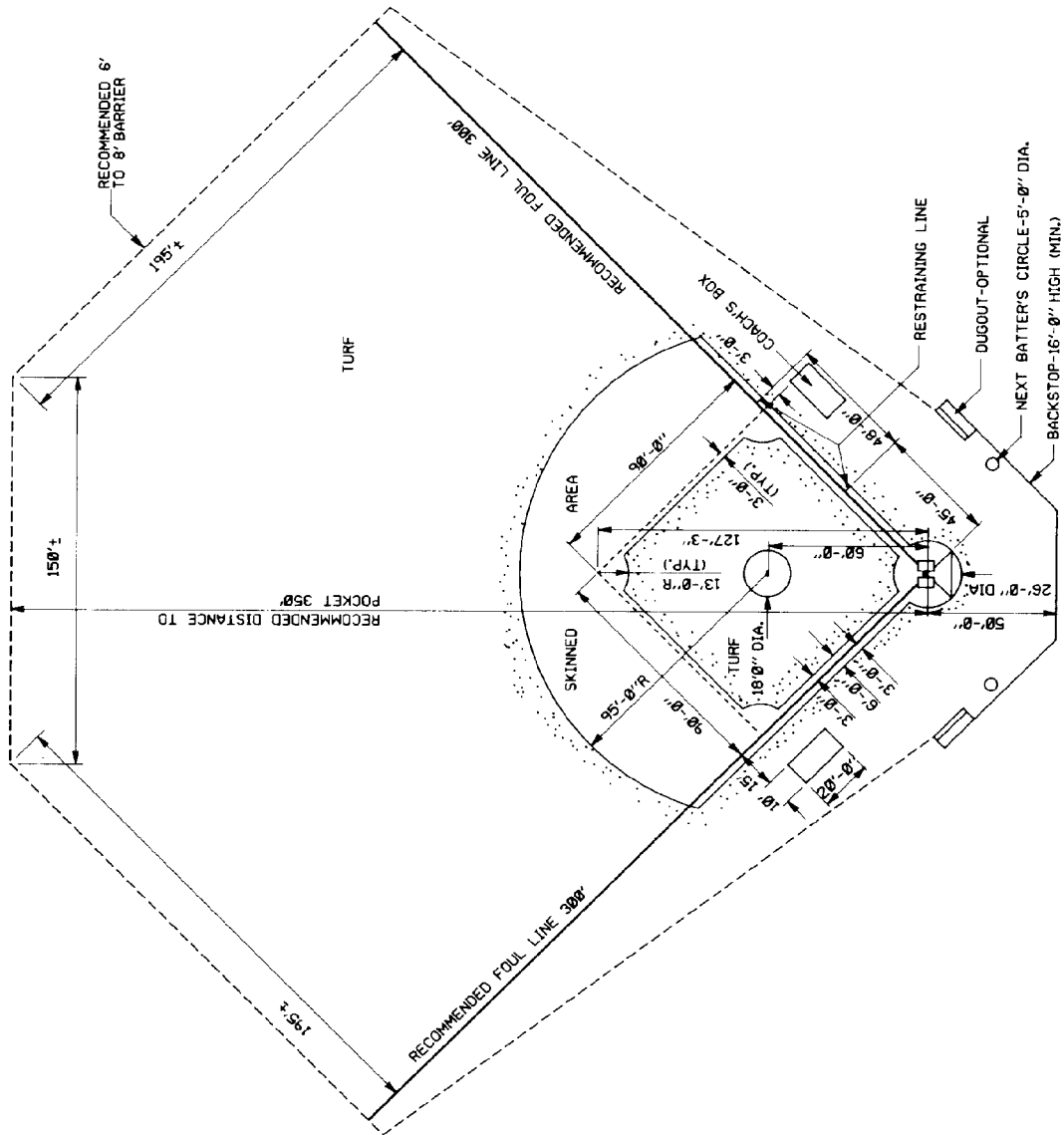
For surfacing details see figure G-5.

For backstop details see manufacturers information.

Figure B-3. Pony League baseball (13-14 yrs.).

B-4. Colt League baseball (15-16 yrs.) (see fig B-4)

- a. *Source of information.* Pony Baseball, Inc.
- b. *Recommended area.* Ground space is 3.0 acres minimum.
- c. *Size and dimension.* Baselines are 90 feet 0 inch. Pitching distance is 60 feet 6 inches. Pitcher's plate is 10 inches above the level of home plate. Distance down foul line is 300 feet. Outfield distance to pocket in center field is 350 feet.
- d. *Orientation.* Optimum orientation is to locate home plate so that the pitcher is throwing across the sun and the batter is not facing it. The line from home plate through the pitcher's mound and second base should run east-northeast.
- e. *Surface and drainage.* Surface is to be turf. Infield may be skinned, and shall be graded so that the baselines and home plate are level.
- f. *Special considerations.* Backstop is to be provided at a recommended distance of 50 feet behind home plate.



PLAYING FIELD LAYOUT

NOTES:

Foul lines, catcher's, batter's and coach's boxes, next batter's circles and restraining line shall be 2" wide and marked with white chalk or other white material. Caustic lime must not be used.

The home plate, the pitcher's rubber and the bases shall be official size as used in regulation baseball.

For layouts at home plate see figure B-2.

For grading and drainage details see figure G-4.

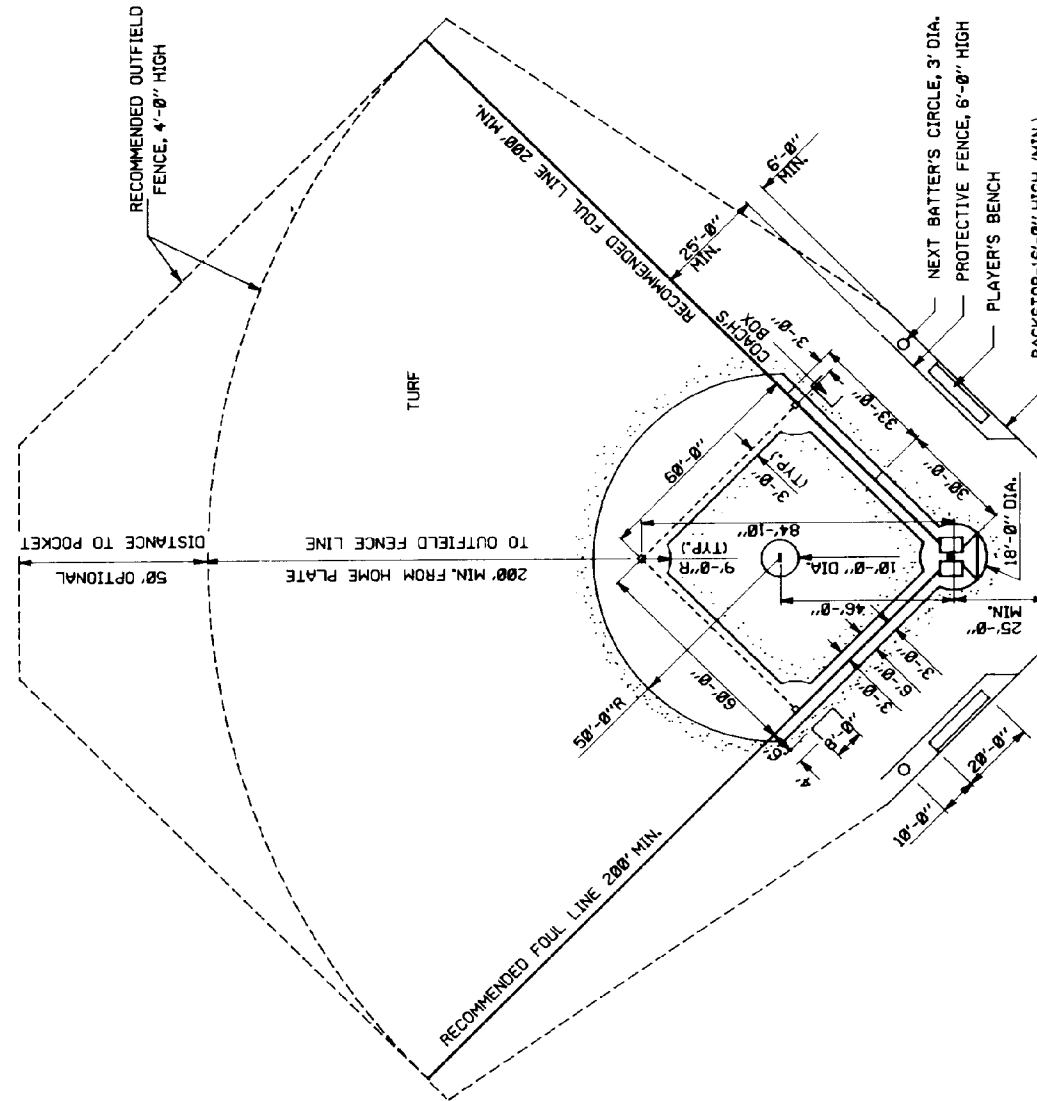
For surfacing details see figure G-5.

For backstop details see manufacturers information.

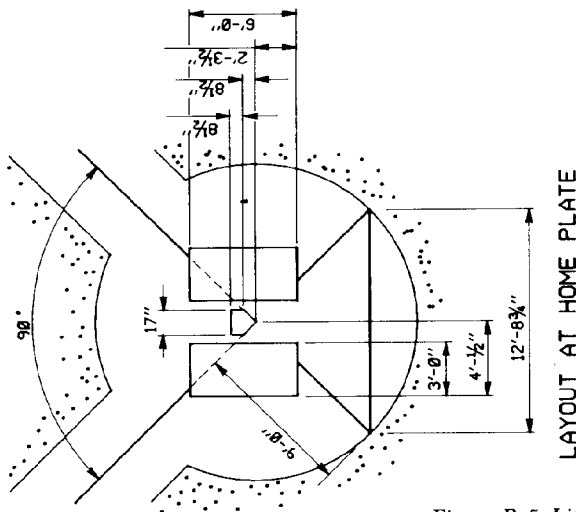
Figure B-4. Colt League baseball (15-16 yrs.).

B-5. Little League baseball (9-12 yrs.) (see fig B-5)

- a. Source of information.* Little League Baseball, Inc.
- b. Recommended area.* Ground space is 1.2 acres minimum.
- c. Size and dimension.* Baselines are 60 feet 0 inch. Pitching distance is 46 feet 0 inch. Pitcher's plate is 6 inches above the level of home plate. Distance down foul line is 200 feet. Outfield distance to pocket in center field is 200 feet to 250 feet optional.
- d. Orientation.* Optimum orientation is to locate home plate so that the pitcher is throwing across the sun and the batter is not facing it. The line from home plate through the pitcher's mound and second base should run east-northeast.
- e. Surface and drainage.* Surface is to be turf. Infield may be skinned, and shall be graded so that the baselines and home plate are level.
- f. Special considerations.* Backstop is to be provided at a recommended minimum distance of 25 feet behind home plate.



PLAYING FIELD LAYOUT



LAYOUT AT HOME PLATE

NOTES:

Foul lines, catcher's, batter's and coach's boxes, next batter's circles and 3' restraining lines shall be 2" wide and marked with white chalk or other white material. Caustic lime must not be used.

The home plate, the pitcher's rubber and the bases shall be official size as used in regulation baseball.

For grading and drainage details see figure G-4.

For surfacing details see figure G-5.

For backstop details see manufacturer's information.

Figure B-5. Little League baseball (9-12 yrs.).

B-6. Softball 12 inch (fast and slow pitch) (see fig B-6)

- a. *Source of information.* Amateur Softball Association of America (ASA).
- b. *Recommended area.* Ground space is 40,000 square feet (0.9 acres) to 90,000 square feet (2.0 acres).
- c. *Size and dimension.* Field size varies depending on player's age group (see table on figure B-6).
- d. *Orientation.* Optimum orientation is to locate home plate so that the pitcher is throwing across the sun and the batter is not facing it.
- e. *Surface and drainage.* Surface is to be turf. Infield may be skinned. The infield shall be graded so that the baselines and home plate are level.
- f. *Special considerations.* Backstop is to be located at a minimum distance of 25 feet behind home plate.

B-7. Softball 16 inch (slow pitch) (see fig B-7)

- a. *Source of information.* Amateur Softball Association of America (ASA).
- b. *Recommended area.* Ground space is 50,625 square feet (1.2 acres) to 75,625 feet (1.7 acres).
- c. *Size and dimension.* Baselines are 55 feet 0 inch for men and women. Pitching distance is 38 feet 0 inch for men and women. Playing field radius from home plate between foul lines is 250 feet for men, 200 feet for women.
- d. *Orientation.* Optimum orientation is to locate home plate so that the pitcher is throwing across the sun and the batter is not facing it.
- e. *Surface and drainage.* Surface is to be turf. Infield may be skinned. The infield shall be graded so that the baselines and home plate are level.
- f. *Special considerations.* Backstop is to be located at a minimum distance of 25 feet behind homeplate.

For notes and "Layout At Home Plate" see figure B-6.

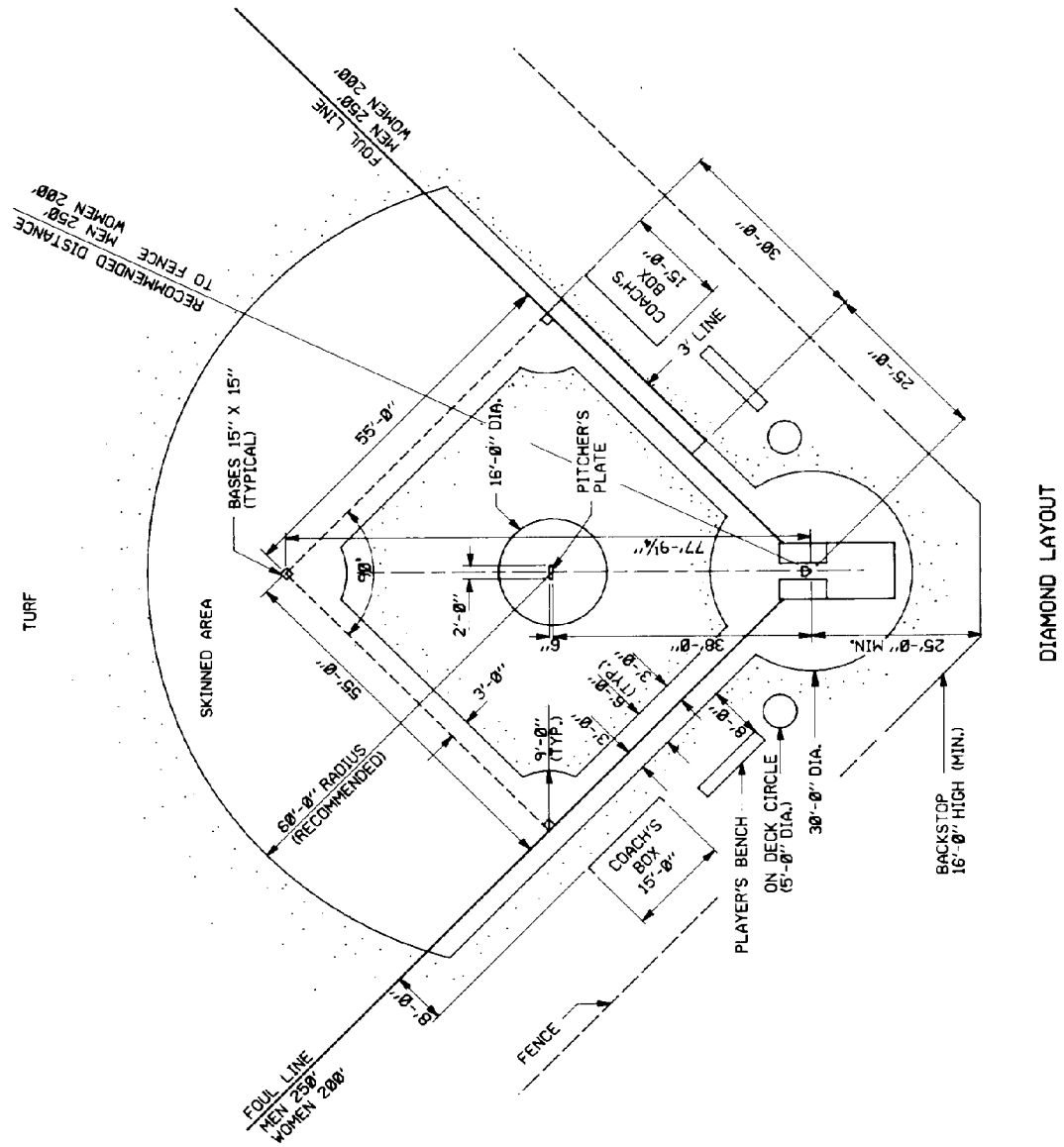


Figure B-7. Softball 16 inch (slow pitch).

B-8. 11-man football (NCAA), Pop Warner Junior League football (see fig B-8)

a. *Source of information.* National Collegiate Athletic Association, (NCAA), Pop Warner Junior League Football.

b. *Recommended area.* Ground space is 70,700 square feet (1.6 acres) minimum.

c. *Size and dimension.* Playing field width is 160 feet 0 inch. Length is 260 feet 0 inch. Additional area required is 12 feet 0 inch minimum unobstructed space on all sides.

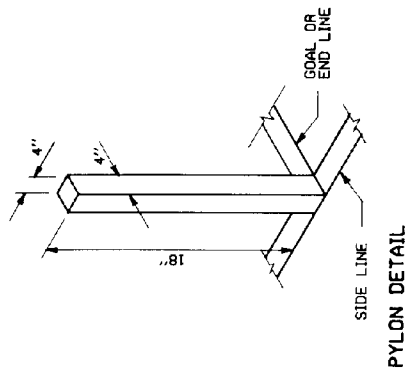
d. *Orientation.* Preferred orientation is for the long axis to be northwest-southeast to suit the angle of the sun in the fall playing season, or north-south for longer periods.

e. *Surface and drainage.*

(2) Preferred grading is a longitudinal crown with a 1 percent slope from center to each side and adequate subdrainage.

(3) Grading may be from side to side or corner to corner diagonally if conditions do not permit the preferred grading.

f. *Special consideration.* Goal posts are to be provided at each end of the playing field. Pylons are to be provided as required by rules.



NOTES:

- All measurements shall be made from the inside edge of lines marking boundaries.
- All field dimension lines shown must be marked 4" in width with a white, nontoxic material which is not injurious to the eyes or skin.
- If cross hatching in end zone is white, it shall be no closer than four feet to the boundary lines.
- Pylon to be constructed of soft flexible material, red or orange in color.
- For goal post construction details see figure G-3.
- For grading and drainage details see figure G-4.
- For surfacing details see figure G-5.

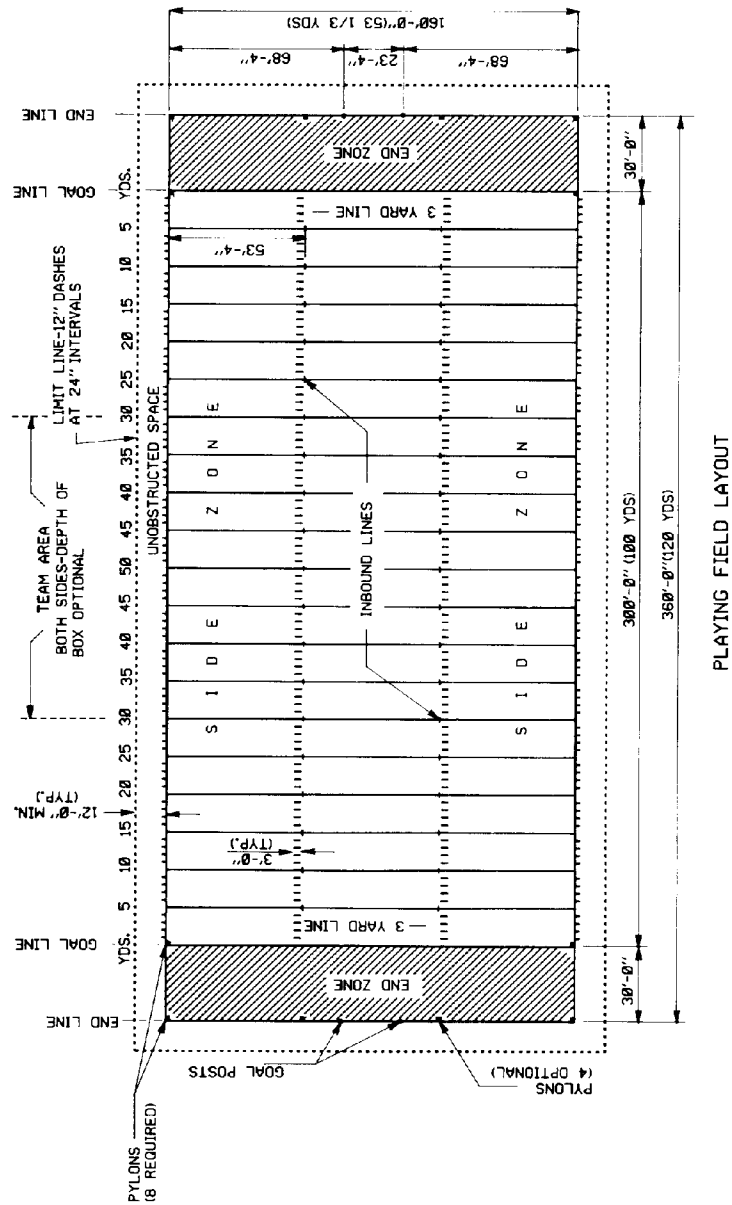


Figure B-8. 11-man football, (NCAA), Pop Warner Junior League football.

B-9. Touch and flag football (see fig B-9)

- a. *Source of information.* National Touch and Flag Football Rules, The Athletic Institute.
- b. *Recommended area.* Ground space is 41,200 square feet (.94 acre) minimum.
- c. *Size and dimension.* Playing field width is 120 feet 0 inch. Length is 300 feet 0 inch. Additional area recommended is 6 feet 0 inch minimum unobstructed space on all sides.
- d. *Orientation.* Preferred orientation is for the long axis to be northwest-southeast to suit the angle of the sun in the fall playing season, or north-south for longer periods.
- e. *Surface and drainage.*
 - (1) Surface is to be turf.
 - (2) Preferred grading is a longitudinal crown with a 1 percent slope from center to each side and adequate subdrainage.
 - (3) Grading may be from side to side or corner to corner diagonally if conditions do not permit the preferred grading.
- f. *Special considerations.* Goal posts are to be provided at each end of the playing field. Pylons are to be provided as required by rules.

NOTES:

All measurements shall be made from the inside edge of lines marking boundaries.

All field dimension lines shown must be marked 4" in width with a white, nontoxic material which is not injurious to the eyes or skin.

If cross hatching in end zone is white, it shall be no closer than four feet to the boundary lines.

Pylon to be constructed of soft flexible material, red or orange in color.

When teams are composed of more than 7 players, a field 360'-0" (120 yds.) long with five 60'-0" (20 yds.) zones and two 30'-0" (10 yds.) end zones is recommended.

For goal post construction details see figure G-3.

For grading and drainage details see figure G-4.

For surfacing details see figure G-5.

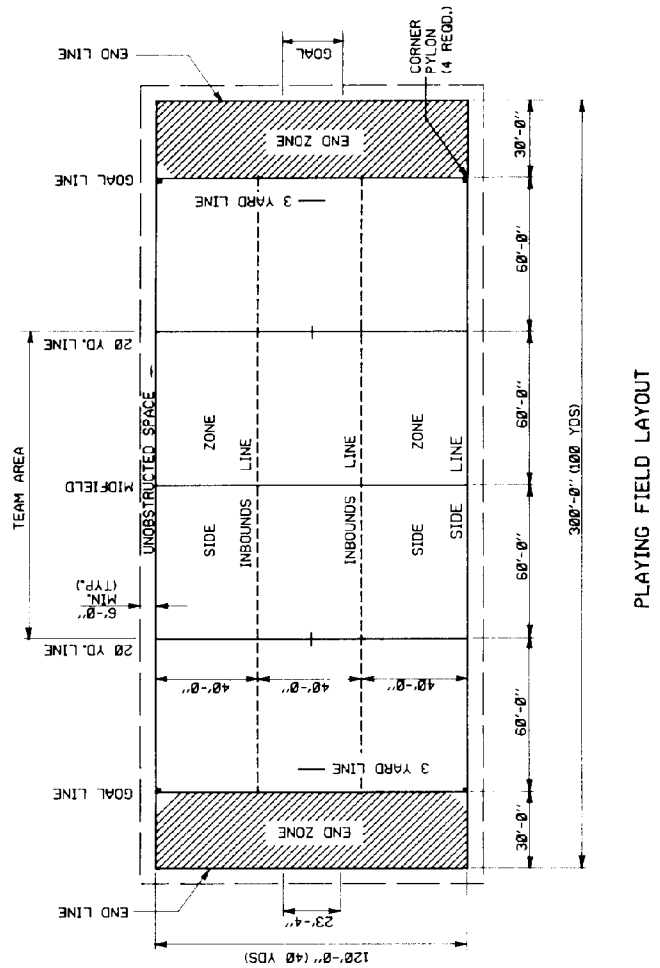
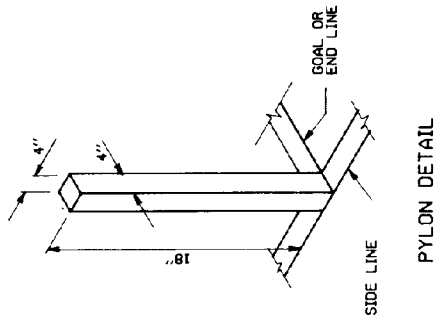
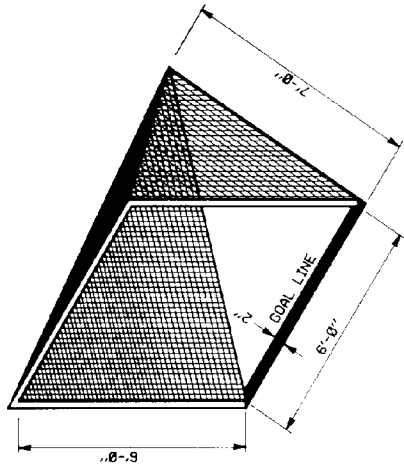


Figure B-9. Touch and flag football.

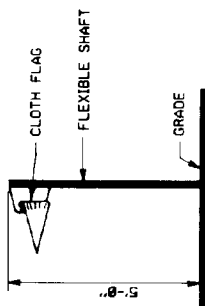
B-10. Lacrosse (men's) (see fig B-10)

- a. *Source of information.* National Collegiate Athletic Association (NCAA).
- b. *Recommended area.* Ground space is 63,000 square feet (1.4 acres) to 81,400 square feet (1.9 acres).
- c. *Size and dimension.* Playing field width ranges from 160 feet 0 inch to 180 feet 0 inch. Length is 330 feet 0 inch. Additional area recommended is 10 feet 0 inch minimum unobstructed space around entire perimeter of field with 5 feet 0 inch or 6 feet 0 inch high barrier fence, or 20 feet 0 inch without fence.
- d. *Orientation.* Preferred orientation is for the long axis to be northwest-southeast to suit the angle of the sun in the fall playing season, or north-south for longer periods.
- e. *Surface and drainage.*
 - (1) Surface is to be turf.
 - (2) Preferred grading is a longitudinal crown with a 1 percent slope from center to each side and adequate subdrainage.
 - (3) Grading may be from side to side or corner to corner diagonally if conditions do not permit the preferred grading.



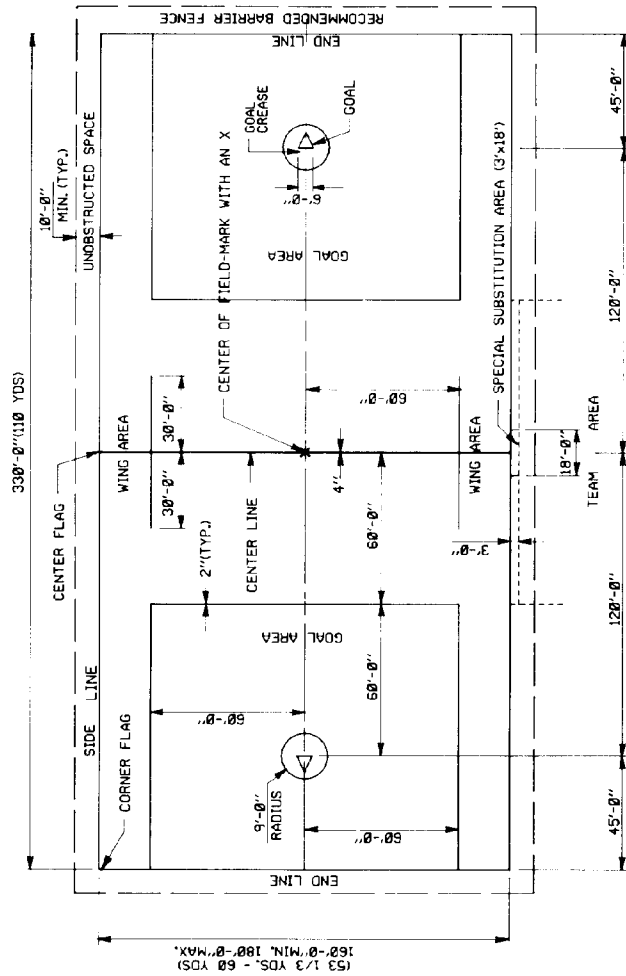
GOAL NOTES:

- Goal net should be cord netting with openings of not more than $1\frac{1}{2}$ ".
- Bottom of net must be held close to the ground with pegs or staples.
- Posts to be pipe, painted orange and secured to the ground.



FLAG DETAIL

DETAIL OF GOAL



PLAYING FIELD LAYOUT

NOTES:

- Lines must be marked with a white non-toxic material which is not injurious to the eyes or skin.
- All lines shall be 2" wide except the center or offside line which should be 4" wide.
- All dimensions are to inside of lines except at center line.
- Flexible flag markers shall be placed at the four corners of the field and at each end of the center line.
- For grading and drainage details see figure G-4.
- For surfacing details see figure G-5.

Figure B-10. Lacrosse (men's).

B-11. Lacrosse (women's) (see fig B-11)

- a. Source of information.* National Association for Girls and Women in Sport (NAG WS).
- b. Recommended area.* Ground space is optional 69,300 square feet (1.6 acres) to 75,600 square feet (1.7 acres).
- c. Size and dimension.* Playing field minimum width is 210 feet 0 inch. Length ranges from 330 feet 0 inch to 360 feet 0 inch. As in the original Indian game, there are no definite boundaries or shape for the field of play, but before a match the officials decide on the boundaries and declare specified obstructions out of bounds.
- d. Orientation.* Preferred orientation is for the long axis to be northwest-southeast to suit the angle of the sun in the fall playing season, or north-south for longer periods.
- e. Surface and drainage.*
 - (1) Surface is to be turf.
 - (2) Preferred grading is a longitudinal crown with a 1 percent slope from center to each side with adequate subdrainage.
 - (3) Grading may be from side to side or corner to corner diagonally if conditions do not permit the preferred grading.

B-12. Soccer (men's and boy's) (see fig B-12)

- a. *Source of information.* United States Soccer Federation (USSF).
- b. *Recommended area.* Ground space is 75,250 square feet (1.7 acres) to 93,100 square feet (2.1 acres).
- c. *Size and dimension.* Playing field width ranges from 150 feet 0 inch to 300 feet 0 inch. Length ranges from 300 feet 0 inch to 390 feet 0 inch. Additional area recommended is 10 feet 0 inch minimum unobstructed space on all sides.
- d. *Orientation.* Preferred orientation is for the long axis to be northwest-southeast to suit the angle of the sun in the fall playing season, or north-south for longer periods.
- e. *Surface and drainage.*
 - (1) Surface is to be turf.
 - (2) Preferred grading is a longitudinal crown with a 1 percent slope from center to each side and adequate subdrainage. Grading may be from side to side or corner to corner diagonally if conditions do not permit the preferred grading.

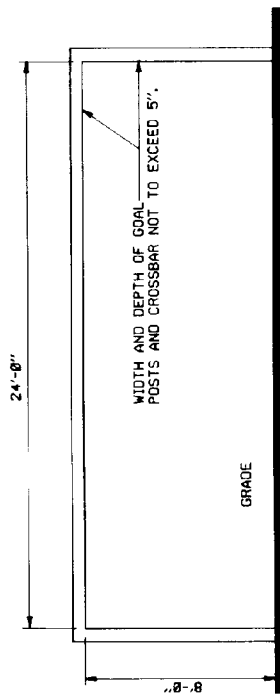
GOAL NOTES:

Goal posts to be pressure treated with paintable, oil-borne preservative and painted above ground with three coats of white lead and oil.

The goalposts and crossbar shall present a flat surface to the playing field, not less than four inches nor more than five inches in width.

Nets shall be attached to the posts, crossbar and ground behind the goal.

The top of the net must extend backward 2'-0" level with the crossbar.



GOAL POSTS

NOTES:

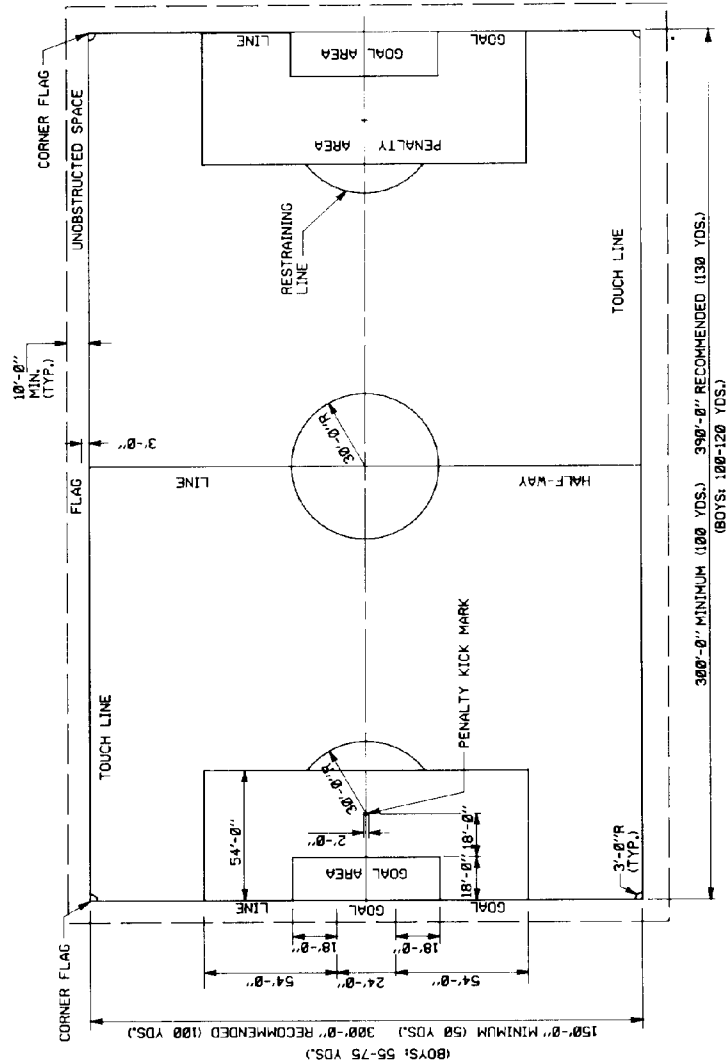
All dimensions are to the inside edge of lines.

All lines shall be 2" wide and marked with a white, non-toxic material which is not injurious to the eyes or skin.

For flag detail see figure B-10.

For grading and drainage details see figure G-4.

For surfacing details see figure G-5.

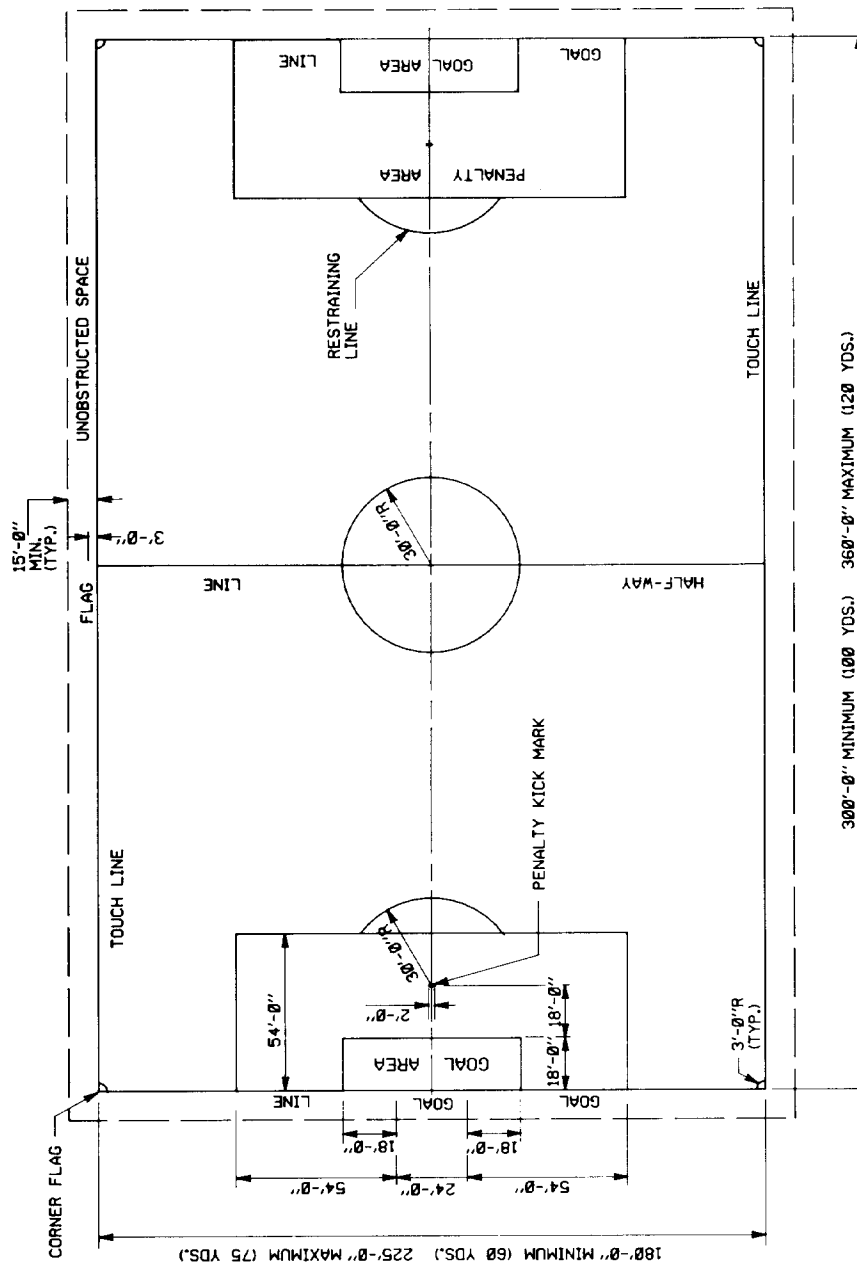


PLAYING FIELD LAYOUT

Figure B-12. Soccer (men's and boy's)

B-13. Soccer (women's and girl's) (see fig B-13)

- a. *Source of information.* United States Soccer Federation (USSF).
- b. *Recommended area.* Ground space is 72,250 square feet (1.7 acre) to 93,100 square feet (2.1 acres).
- c. *Size and dimension.* Playing field width is 195 feet 0 inch to 225 feet 0 inch. Length is 330 feet 0 inch to 360 feet 0 inch. Additional area recommended is 15 feet 0 inch minimum unobstructed space on all sides.
- d. *Orientation.* Preferred orientation is for the long axis to be northwest-southeast to suit the angle of the sun in the playing season, or north-south for longer periods.
- e. *Surface and drainage.*
 - (1) Surface is to be turf.
 - (2) Preferred grading is a longitudinal crown with a 1 percent slope from center to each side and adequate underdrainage.
 - (3) Grading may be from side to side or corner to corner diagonally if conditions do not permit the preferred grading.



PLAYING FIELD LAYOUT

NOTES:

All dimensions are to the inside edge of lines.

All lines shall be 2" wide and marked with a white, non-toxic material which is not injurious to the eyes or skin.

For flag detail see figure B-10.

For grading and drainage details see figure G-4.

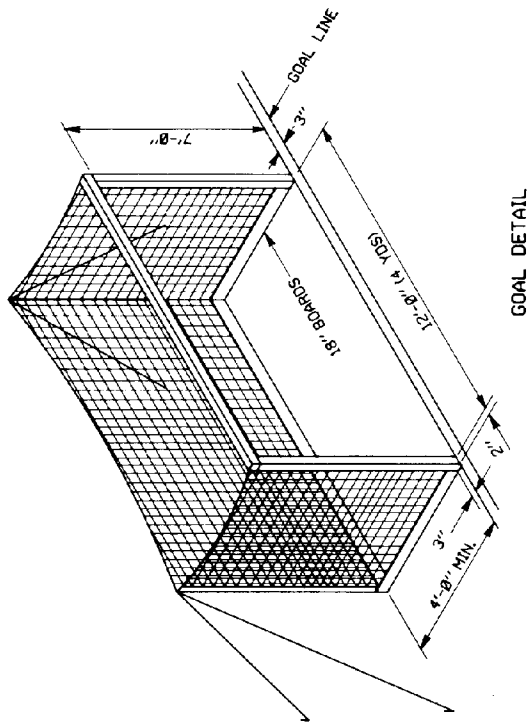
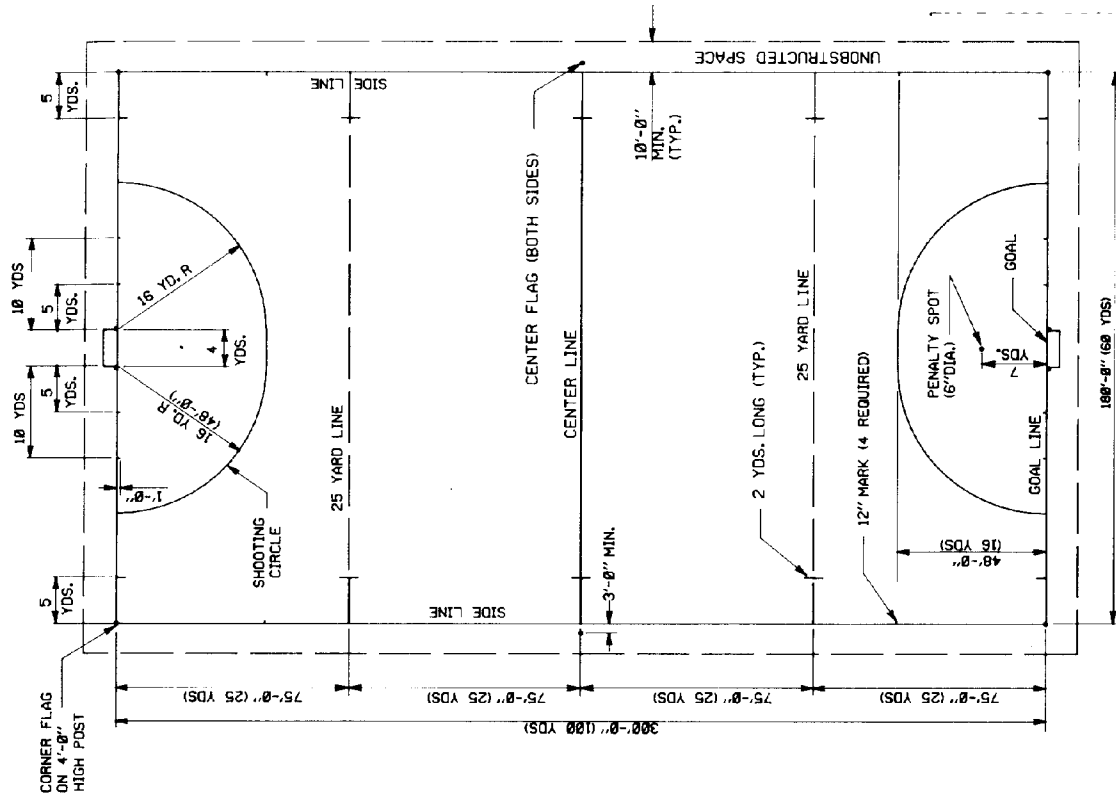
For surfacing details see figure G-5.

For goal post details and notes see figure B-12.

Figure B-13. Soccer (women's and girl's).

B-14. Field hockey (see fig B-14)

- a. *Source of information.* Field Hockey Association of America (FHAA).
- b. *Recommended area.* Ground space is 64,000 square feet (1.5 acres) minimum.
- c. *Size and dimension.* Playing field width is 180 feet 0 inch. Length is 300 feet 0 inch. Additional area recommended is 10 feet 0 inch minimum unobstructed space on all sides.
- d. *Orientation.* Preferred orientation is for the long axis to be northwest-southeast to suit the angle of the sun in the fall playing season, or north-south for longer periods.
- e. *Surface and drainage.*
 - (1) Surface is to be turf.
 - (2) Preferred grading is a longitudinal crown with a 1 percent slope from center to each side and adequate subdrainage.
 - (3) Grading may be from side to side or corner to corner diagonally if conditions do not permit the preferred grading.



NOTES:

- All measurements shall be made from the inside edge of lines marking boundaries.
- Solid and broken lines shall be white, 3" wide and marked with a non-toxic material which is not injurious to the eyes or skin.
- Goal posts and crossbar should be painted white.
- For grading and drainage details see figure G-4.
- For surfacing details see figure G-5.

Figure B-14. Field hockey.

B-15. Flickerball (see fig B-15)

- a. Source of information.* Rules furnished by United States Air Force.
- b. Recommended area* Ground space is 17,600 square feet (.4 acre) minimum.
- c. Size and dimension.* Playing field width is 90 feet 0 inch. Length is 160 feet 0 inch. Goals are 15 feet 0 inch beyond each end line. Additional area recommended is 6 feet 0 inch minimum unobstructed space on all sides.
- d. Orientation.* Preferred orientation is for the long axis to be northwest-southeast to suit the angle of the sun in the fall playing season, or north-south for longer periods.
- e. Surface and drainage.*
 - (1) Surface is to be turf.
 - (2) Preferred grading is a longitudinal crown with a 1 percent slope from center to each side and adequate subdrainage.
 - (3) Grading may be from side to side or corner to corner diagonally if conditions do not permit the preferred grading.

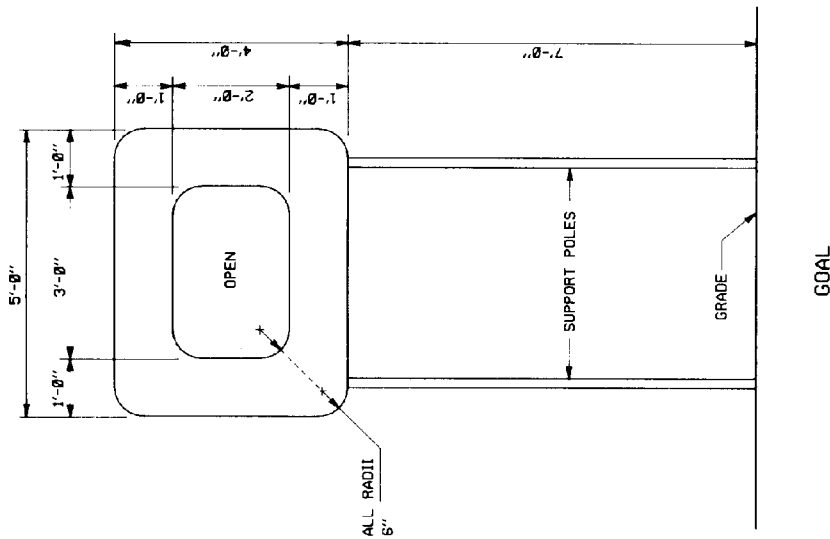
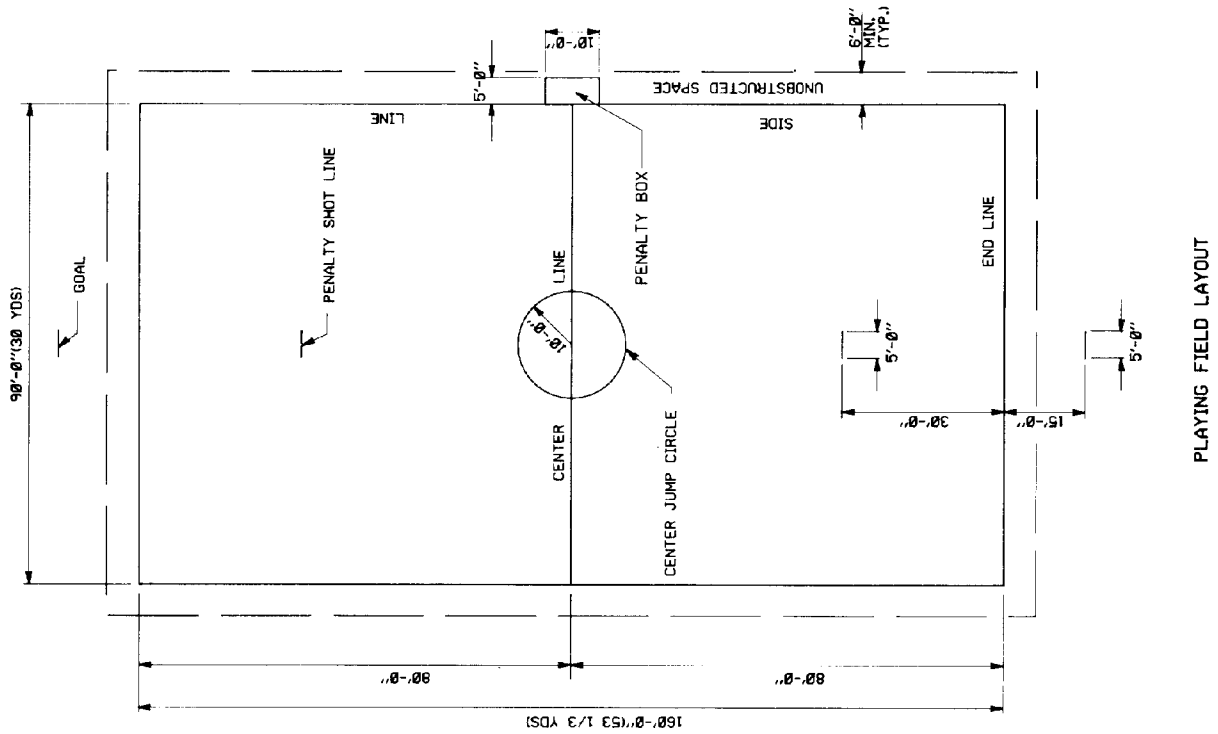


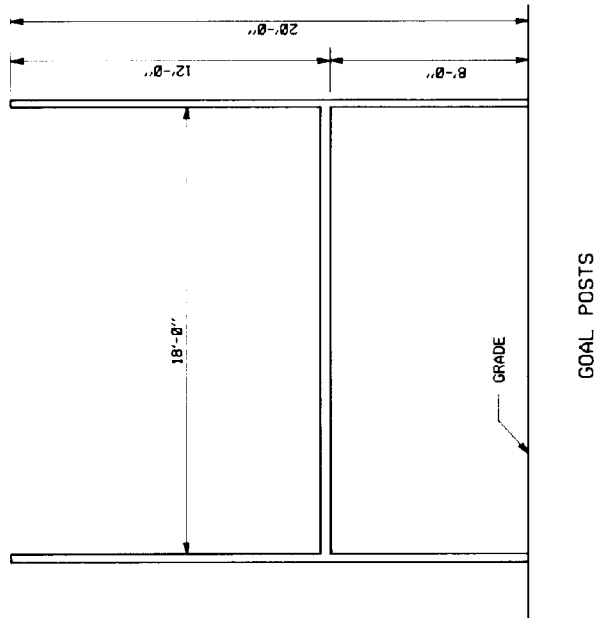
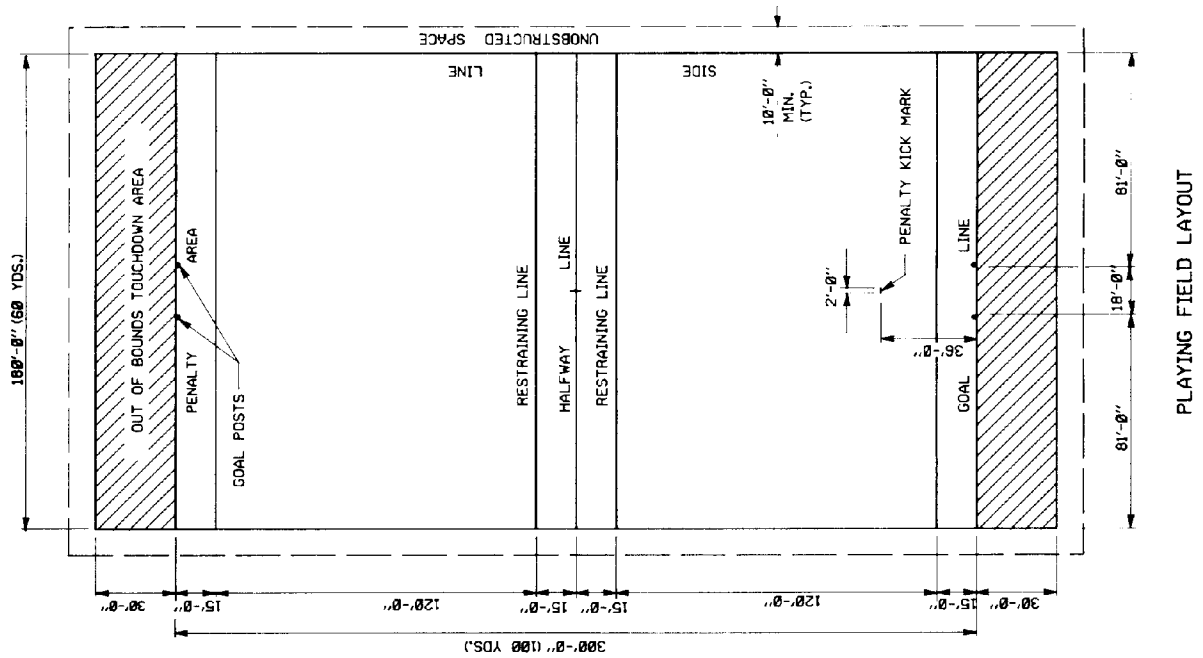
Figure B-15. Flickerball.

NOTES:

All measurements shall be made from the inside edge of lines marking boundaries.
Lines shall be white and 3" wide and marked with a non-toxic material which is not injurious to the eyes or skin.
For grading and drainage details see figure G-4.
For surfacing details see figure G-5.

B-16. Speedball (see fig B-16)

- a. *Source of information.* National Association for Girls and Women in Sport (NAGWS).
- b. *Recommended area.* Ground space is 36,400 square feet (0.8 acre) (high school) to 76,000 square feet (1.7 acres).
- c. *Size and dimension.* Playing field width is 180 feet 0 inch. Length is 300 feet 0 inch. An additional 30 feet by 180 feet out of bounds touchdown area is recommended on each end and unobstructed space of 10 feet 0 inch on all sides. High school field may be 120 feet wide by 240 feet long.
- d. *Orientation.* Preferred orientation is for the long axis to be northwest-southeast during the fall playing season, or north-south for longer periods.
- e. *Surface and drainage.*
 - (1) Surface is to be turf.
 - (2) Preferred grading is a longitudinal crown with a 1 percent slope from center to each side and adequate underdrainage.
 - (3) Grading may be from side to side or corner to corner diagonally if conditions do not permit the preferred grading.



NOTES:

All dimensions are to inside edge of lines.

All field markings to be 2" wide and marked with a white non-toxic material which is not injurious to the eyes or skin.

For goal post details see figure G-3.

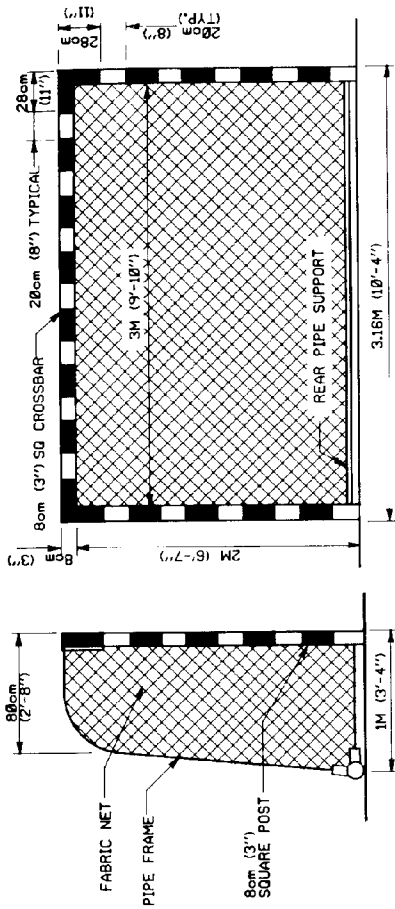
For grading and drainage details see figure G-4.

For surfacing details see figure G-5.

Figure B-16. Speedball.

B-17. Team handball (see fig B-17)

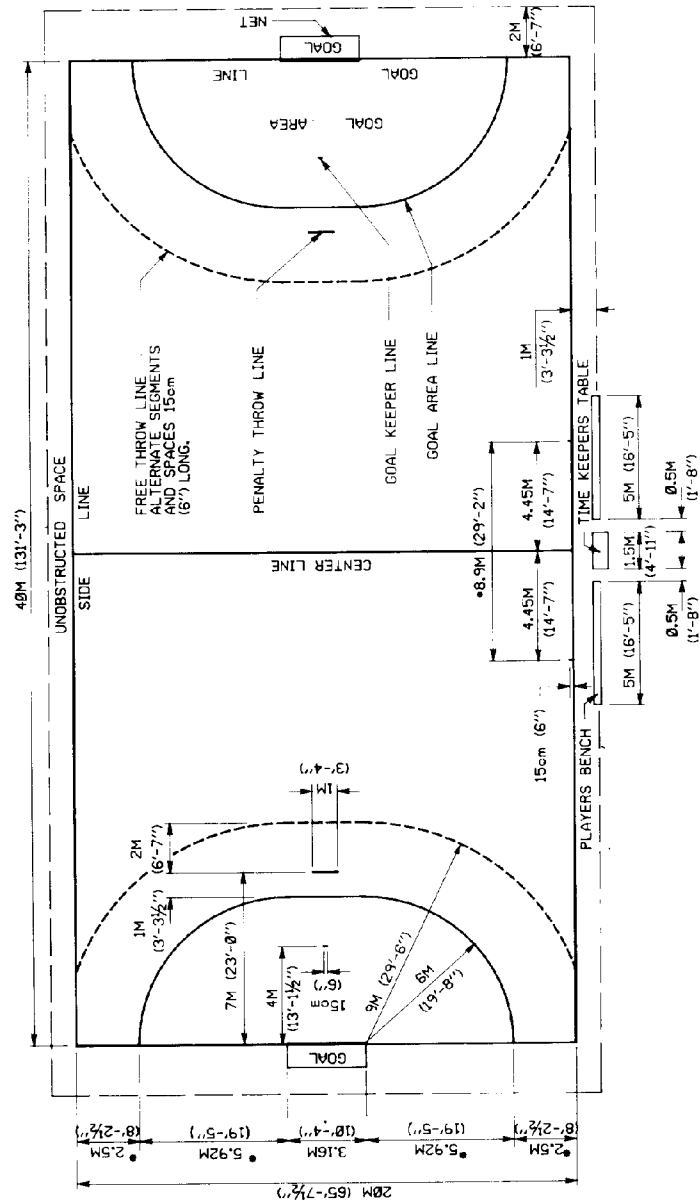
- a. Source of information.* United States Team Handball Federation (USTHF).
- b. Recommended area.* Ground space is 1,033 square meters (11,120 square feet (0.26 acre)).
- c. Size and dimension.* Playing field width is 20 m (65 feet 7-½ inches). Length is 40 m (131 feet 3 inches). Additional area recommended is 2.0 m (6 feet 7 inches) minimum unobstructed space on all sides.
- d. Orientation.* Preferred orientation is for the long axis to be northwest-southeast during the fall playing season, or north-south for longer periods.
- e. Surface and drainage.*
 - (1) Surface is to be turf.
 - (2) Preferred grading is a longitudinal crown with a 1 percent slope from center to each side and adequate subdrainage.
 - (3) Grading may be from side to side or corner to corner diagonally if conditions do not permit the preferred grading.



GOAL POSTS AND CROSSBAR

NOTES:

- Team handball goal posts and crossbar are metal or wood painted on all sides in two contrasting colors. Goals will be fixed to the ground with hooked stakes.
- The goal line between the goal posts is the same width as the posts.
- Back edge of goal posts shall be in line with outer edge of goal line.
- The radius locating the goal area line and free throw lines are measured from the back inside corner of the goal posts and include the width of the line.
- All field markings are 5cm (2 inches) wide and form part of the area they enclose.
- Lines shall be marked with a white, non-toxic material which is not injurious to eyes or skin.
- For grading and drainage details see figure G-4.
- For surfacing details see figure G-5.



PLAYING FIELD LAYOUT

*Notes: measurement made to the outside edge of lines.

Figure B-17. Team handball.

B-18. Golf driving range (see fig B-18)

- a. Source of information.* National Golf Foundation, Inc.
- b. Recommended area.* Ground space for minimum of 25 tees is 13.5 acres.
- c. Size and dimension.* Minimum length is 900 feet (300 yards). Minimum width, including buffer area on each side, is 620 feet (206.7 yards). Add 12 feet width per additional tee.
- d. Orientation.* Preferred orientation is for the long axis to run southwest to northeast with the golfer driving toward the northeast.
- e. Surface and drainage.*
 - (1) Surface is to be turf closely mowed in center for ball collection. Side buffer areas are to be rough cut.
 - (2) Drainage is to be away from raised tee area and preferably across the axis of play. Side buffer areas may rise to help contain stray drives.
- f. Special consideration.*
 - (1) The use of tee mats reduces maintenance. Automatic ball tees enable golfers to hit more balls in a shorter period and is a convenience.
 - (2) Target greens are recommended as they give golfers something at which to aim drives.

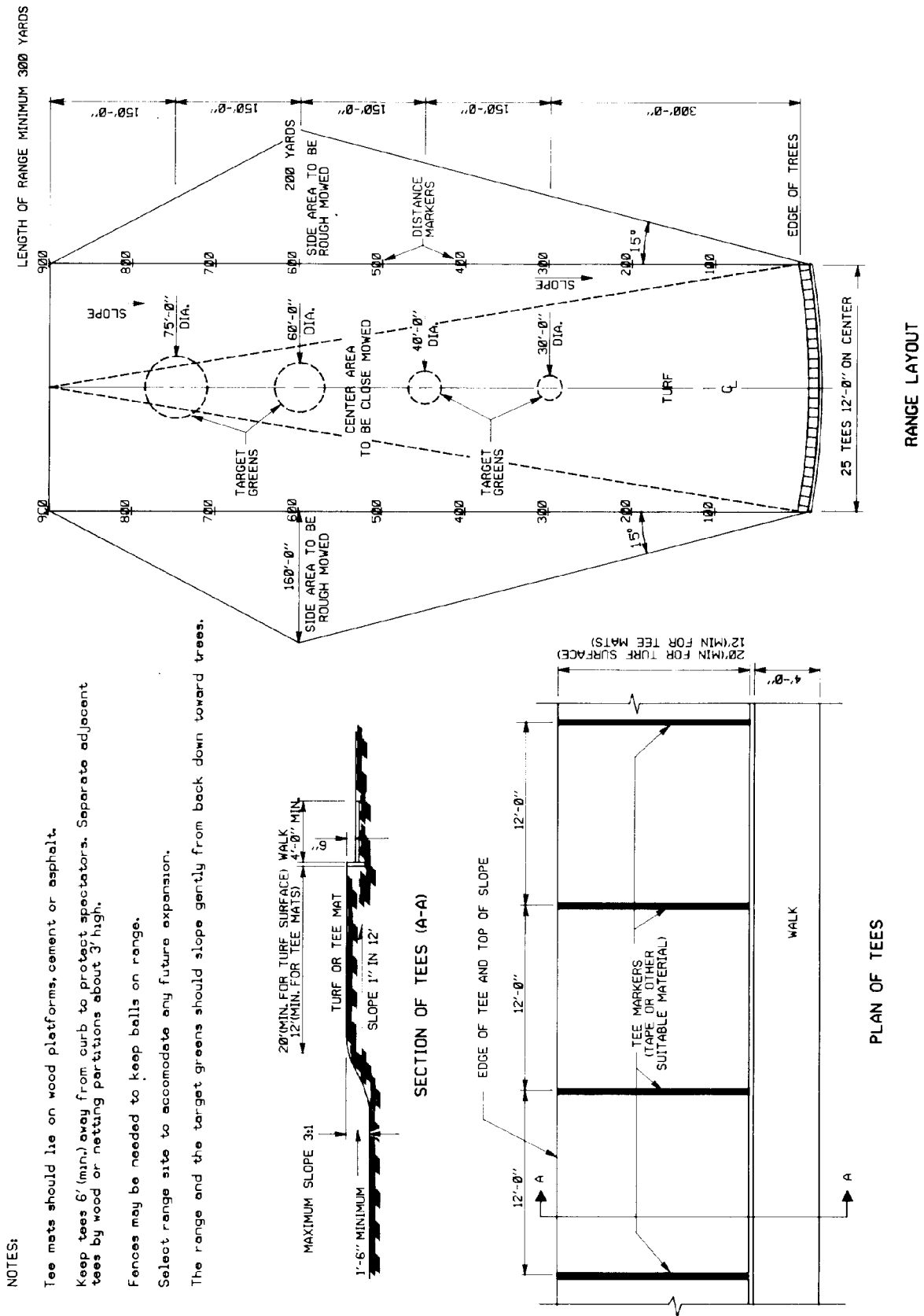


Figure B-18. Golf driving range.